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Job Creation and Employment Opportunities: The United States Labor Market, 1993-1996

A Report by the
Council of Economic Advisers
with the U.S. Department of Labor, Office of the Chief Economist

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EXECUTIVE SUMMARY

- * Since January 1993, employment has grown rapidly -- expanding by 8.5 million net new jobs. Based on comparable data, employment growth has been stronger in the United States than in any of our G-7 partners.
- * Two-thirds (68 percent) of the net growth in full-time employment between February 1994 and February 1996 occurred in industry/occupation groups paying above-median wages. Over half of the net growth occurred in the top 30 percent of job categories. Although many of these new jobs were in the service sector, they did not conform to stereotypes.
- * The evidence suggests that the vast majority of the net new jobs are full-time. Both the household and establishment surveys indicate that job growth has been concentrated in full-time positions.
- * The share of workers holding multiple jobs has remained roughly constant since the late 1980s. The household survey suggests that the proportion of employed persons working multiple jobs has remained at about 6 percent.
- * The overall number of workers displaced was roughly the same proportion of the workforce in 1991-2 as in 1981-2, although the recession during the early 1980s was more severe than the one during the early 1990s. However, it is difficult to determine precisely how to account for the business cycle in assessing displacement rates. The official data on displacement after 1993 are not yet available, but an alternative job loss measure has fallen since then.
- * The characteristics of displaced workers have changed somewhat. <u>Displacement rates for older, white-collar and better educated workers have risen, although they remain low relative to those for younger, blue-collar, and less educated workers.</u>
- Despite some recent positive signs, long-term challenges remain. Between the 1970s and the early 1990s, real wages stagnated and income inequality widened. But in 1994, for the first time in 5 years, real median family income rose and the poverty rate fell. We must continue to build on these gains to improve living standards and reduce income inequality. And although many more jobs are being created than destroyed, a dynamic economy inevitably imposes costs on some workers. For example, data from 1981 to 1993 indicate that job losers were more likely to be permanently dismissed (rather than temporarily laid-off), that older workers were subject to greater risk of job displacement, and that the average real wage loss due to displacement was significant and persistent. In order to obtain the full benefits of a dynamic economy, we must reduce these adjustment costs.

INTRODUCTION

Employment growth in the United States has been robust since January 1993, with nonfarm payroll employment expanding by 8.5 million. Based on comparable data, U.S. employment growth has been stronger than in any of our G-7 partners. The first purpose of this study is to sift through the evidence to develop a more detailed picture of where the job growth is occurring and the nature of the jobs being created.

The news is encouraging: employment has grown disproportionately in the industry/occupation job categories paying above-median wages. Even in the traditionally lower-paying service industry, a majority of the net employment growth has been in managerial and professional specialty positions, which typically pay above-median wages. Contrary to conventional wisdom, the new jobs are not disproportionately part-time, low-skill positions.

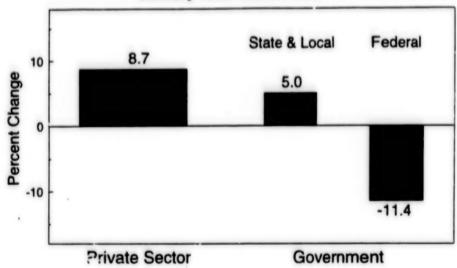
The second purpose of the study is to examine job displacement. Although the economy is generating millions of net new jobs, it is clear that the speed of transformation in the U.S. labor market has left many American workers anxious about their economic futures. A dynamic and growing labor market can impose costs as well as offer opportunities, and policies to help workers deal with job transitions are critical to reducing these adjustment costs.

JOB CREATION

According to the Bureau of Labor Statistics establishment survey, nonfarm employment grew by 8.5 million (7.8 percent) between January 1993 and March 1996. Private-sector payrolls (up 8.7 percent) grew even faster, while federal payrolls (excluding the postal service) actually declined by 11.4 percent, and state and local government payrolls combined grew by only 5.0 percent (see Figure 1). The public sector's share of employment is therefore falling.

The unemployment rate has fallen from over 7 percent in January 1993 to 5.6 percent in March 1996, and has been below 6 percent for 19 consecutive months. Given current demographic trends, the Bureau of Labor Statistics projects the labor force to continue growing by approximately 1.1 percent annually between 1994 and 2005. Therefore, to keep unemployment low, the economy needs to average a net increase of about 120,000 new jobs per month. Employment is now expanding at a pace consistent with steady, sustainable growth and low unemployment.

Figure 1
Private Sector and Government Employment Growth
January 1993 - March 1996



Note: Federal employment excludes the postal service.

Based on data from the Bureau of Labor Statistics, establishment survey.

International Comparisons. The United States has experienced faster employment growth than any of the other G-7 countries. Only Canada has experienced any significant employment growth, while the other G-7 members have experienced negligible job gains or outright declines. The U.S. labor market performance is particularly impressive given that it has occurred during a period in which the federal budget deficit was reduced from 4.9 percent of GDP in FY 1992 to an estimated 1.9 percent in FY 1996.

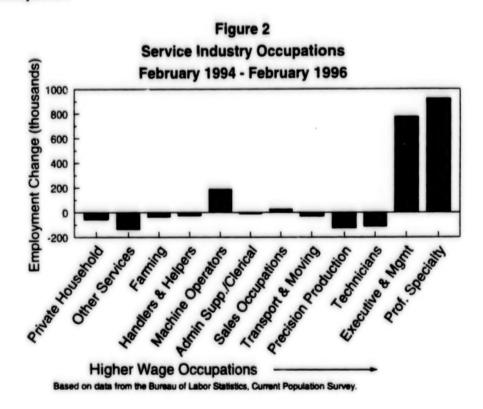
THE QUALITY OF JOBS

According to data from the Current Population Survey, 38 percent of the net employment growth between February 1994 and February 1996 occurred in "service" industries. This section therefore first examines job quality in the service sector. It then presents a more detailed analysis of all sectors of the economy.

¹A major redesign of the survey in January 1994 makes long-term comparisons difficult. Moreover, because the household survey data are often not seasonally adjusted, we try to compare the same month in different years. The sample period we study is therefore February 1994 to February 1996.

Higher-paid Jobs in the Service Sector. The "service sector" is quite diverse. It includes many low-wage positions, but also many high-wage positions in financial services, hospitals, and computer and accounting services. For this reason, it is important to determine whether employment growth within services has occurred primarily in the high-skill managerial and professional specialty occupations or in low-paying occupations. The Current Population Survey provides evidence on employment growth by occupation.

* The data show that recent net job growth in services has been predominately in managerial or professional specialty positions (Figure 2). These are relatively high-paid occupations.



Thus, the conventional wisdom suggesting that the growth in service sector employment is disproportionately concentrated in low-wage job categories is wrong.

Growth of Higher-paid Jobs by Industry and Occupation. An even more detailed picture of the nature of the new jobs created emerges from an examination of industry/occupation categories. Using data from the February 1994 and February 1996 Current Population Surveys, we sorted full-time workers into 45 detailed occupations in 22 major industries. A quarter of the sample reported earnings in addition to the industries and occupations in which they worked.

Although many of the possible 990 industry/occupations cells were small, only 6 percent of the population-weighted sample was found in cells with 10 or fewer sample members reporting earnings data for both surveys. In order to avoid the high sampling variability associated with insufficient numbers of observations, we eliminated these small cells from our analysis. There were 287 job categories in each year after eliminating the cells with 10 or fewer sample members.²

The first step in our analysis was to rank the 287 occupation/industry cells by the median weekly earnings of full-time workers. Approximately half of all full-time employment in February 1994 was found in cells with median weekly earnings above \$480 (in February 1996 dollars). The employment growth in these "high-wage" job categories can then be compared to overall employment growth. Our key measure of job quality is the percentage of total employment growth that occurred within the occupation and industry categories that paid above-median wages in February 1994. The results were striking.

* Two-thirds (68 percent) of the net growth in full-time employment between February 1994 and February 1996 was found in job categories paying above-median wages.³

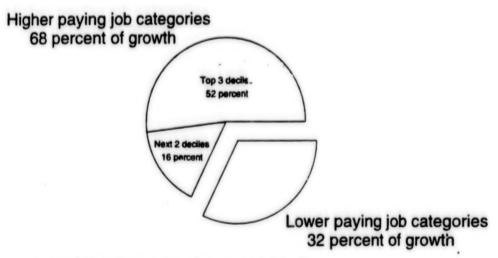
Another way to summarize the results from our industry/occupation analysis is shown in Figure 3. Here we ranked the 287 industry/occupation categories by their median weekly earnings for full-time workers, and sorted them into 10 ordered groupings -- each with 10 percent of employment in February 1994 -- by their earnings ranking. If all 10 groups had grown proportionately to their share of employment in February 1994, each would have accounted for 10 percent of the net new employment. But rather than accounting for their proportional share of total employment growth (30 percent), the top three deciles accounted for much more (over 50 percent).

* Over half (52 percent) of employment growth was found in the top 30 percent of job categories.

² The average remaining industry/occupation cells included 331 sample members and contained earnings data for 70 sample members.

As a result of sampling variability in the monthly surveys, the precise figure may be affected by the months chosen for comparison. We have also performed the same exercise using hourly wages for full-time and part-time workers combined. The results are similar.

Figure 3
Shares of Net Employment Growth
February 1994 - February 1996



Council of Economic Advisers analysis of Bureau of Labor Statistics data.

More Detailed Data on Occupations. The Bureau of Labor Statistics also publishes an annual series on wages and employment growth for an extremely detailed set of occupational categories used on pooling a year's population survey responses. The survey included 488 categories with data for both 1994 and 1995 (the 1996 annual estimates will not be available until next year). The results from this data set give additional support to the results reported above. Some of the categories with the largest employment gains included "sales supervisors and proprietors," "electricians," "managers of marketing and advertising," and "electrical and electronic engineers." And consistent with the above calculations, the detailed occupations in the top half of the wage distribution accounted for 70 percent of the net employment growth, while the top 10 percent of the distribution produced a third of net employment growth.

* Employment in "hamburger-flipping jobs" actually fell between 1994 and 1995.

In sum, the data indicate the following about the nature of recent job growth:

- Two-thirds of full-time job growth between February 1994 and February 1996 occurred in occupation/industry categories paying above-median wages.
- Over half of full-time job growth between February 1994 and February 1996 was in occupation/industry categories paying even higher wages (top 30 percent).

The New Jobs are Mostly Full-Time. Data from both the Current Population Survey and the BLS establishment survey indicate that most of the net new jobs are full-time. The Current Population Survey includes data on part-time employment. Figure 4 portrays the proportion of employed persons reporting that they worked part-time for "economic" as well as for "non-economic" reasons. Despite a shift in both series corresponding to a redesign of the survey in January 1994, the proportion of employed persons reporting to be employed part-time has actually declined slightly. The declines have been even larger for those working part-time for "economic" reasons, often referred to as the "involuntarily underemployed."

The establishment data indirectly support the conclusions from the household survey. If the net new jobs were disproportionately part-time, we would expect average hours worked per job to fall.⁵ But the employment data show that average hours worked for all jobs (including the new jobs) remained roughly constant: the number of nonfarm payroll positions and the total number of hours worked both grew at about the same rate over the past three years (see table). This suggests that the new jobs have not been disproportionately part-time.

* Data collected from both households and companies indicate that most of the net job creation over the past three years has been full-time.

⁴ These are defined as workers in the food counter, fountain and related occupations; and kitchen workers, food preparation, and miscellaneous food preparation occupations. The result holds both for full-time and for all workers (full-time and part-time combined).

⁵ This assumes that average hours worked on existing jobs did not change. Unfortunately, existing statistics do not allow us to verify whether this assumption holds.

Part-Time Workers

16
14
Non-Economic Reasons
CPS redesign

Economic Reasons
Jan. 1990 Jan. 1991 Jan. 1992 Jan. 1993 Jan. 1994 Jan. 1995 Jan. 1996

Based on data from the Bureau of Labor Statistics, Current Population Survey.

Employment and Hours Worked at Nonfarm Establishments

	January 1993	March 1996	Percent Change
Employment (millions)	109.5	118.0	7.8
Hours worked (annual basis, billions)	202.2	217.8	7.7

Based on data from the Bureau of Labor Statistics.

Little Change in Multiple Job Holding. Some Americans decide to hold more than one job, in order to save for a house or to meet unexpected expenses. Nonetheless, multiple job holding would raise concerns about the quality of jobs if an increasing number of Americans have to work two or three jobs to make ends meet. A frustrated worker is said to have reacted to the news that 8.5 million new jobs have been created by replying, "Yeah, and I have three of them." But the data simply do not indicate any significant movement in multiple job holding.

The percentage of employed persons working multiple jobs has remained in the neighborhood of 6 percent since the late 1980s.

Impact on Wages and Income Inequality. Between the 1970s and the early 1990s, average real wage growth slowed and income inequality widened. In recent years, however, there are some encouraging signs that the tide may be turning on these labor market challenges. In 1994 -- the most recent year for which data are available -- real median family income rose and the poverty rate fell for the first time in 5 years. Improving job quality can enhance these recent gains, although the effects may only become manifest after an extended period of time. As discussed above, most of the recent net increase in employment has occurred in occupations and industries that typically pay above-median wages. But the additions to the workforce have had only a marginal effect on aggregate wage data, since net employment growth represents only a relatively small percentage of total employment for the U.S. workforce. Nevertheless, the news about the quality of net job growth is encouraging, and bodes well for the future. Although there is still much left to be done, recent trends show that the labor market is on the right track.

THE CHALLENGES CREATED BY A DYNAMIC LABOR MARKET

A dynamic, healthy labor market creates enough jobs to accommodate a growing labor force. But at the same time, jobs in a dynamic economy continually shift away from certain areas and toward other areas with greater growth opportunities. (For example, the decline in federal payrolls has been more than offset by increases in private-sector employment.) Meanwhile, research conducted by Robert Valletta and published by the Federal Reserve Bank of San Francisco concluded that, after controlling for the business cycle, the share of unemployment attributable to permanent dismissals (rather than temporary layoffs) has increased -- particularly from 1980 to 1993. A higher proportion of job losers thus do not expect to be recalled by their former employers. As a result of these labor market changes, many workers feel less secure about their job prospects.

While the anxiety felt by many workers is real and important, it is also important to take an objective look at the evidence. Not all sources demonstrate increased economic anxiety. For example, the Michigan and Conference Board surveys of consumer sentiment recently have been above their historical averages. Respondents to those surveys apparently do not view employment prospects as poor. Nevertheless, considerable evidence suggests that many Americans are concerned, some very concerned, about job displacement. In order to know how bust to respond to these concerns, we need a more precise assessment of the nature of the displacement problem. Has job displacement in fact increased? Is it affecting different categories of individuals today than it did ten years ago? This section of the report examines these questions.

Evidence from the Displaced Worker Survey. The BLS conducts a survey of displaced workers every two years, with the most recent published data from February 1994. The table below summarizes the displacement rates (defined as the number of workers displaced per 100 employed) for the 1981-82 and 1991-92 periods.

The overall number of workers displaced was roughly the same proportion of the workforce in 1991-2 as in 1981-2, although the recession in the early 1980s was more severe than the one in the early 1990s. However, it is difficult to determine precisely how to account for the business cycle in assessing displacement rates. A comparison of aggregate displacement rates also conceals a fundamental change in the *incidence* of job displacement. The table shows that older, white-collar workers were considerably more at risk of displacement in 1991-92 than during the previous recession. And further analysis shows that job displacement rates rose for more educated workers. These changes in the incidence of job displacement may be a reason for the reports of heightened anxiety regarding job loss. Although blue-collar and less educated workers remain more likely to be displaced than others, displacement rates have clearly risen among those workers who had previously been largely immune from the threat of job dislocation.

* Displacement rates for older and more educated workers, who had largely been unaccustomed to facing such risk, rose between 1981-2 and 1991-2.

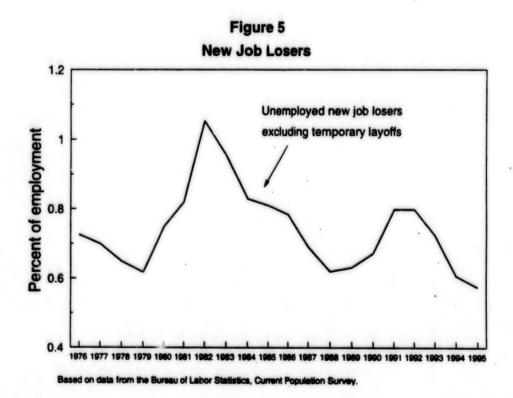
Changing incidence of displacement			
	Displacement Rates*		
	1981-2	1991-2	
Total	3.9	3.8	
Occupations			
White-collar	2.6	3.6	
Blue-collar	7.3	5.2	
Age			
25-34 years of age	5.0	3.8	
35-44 years of age	3.8	3.9	
45-54 years of age	3.0	3.8	
55+	3.6	4.3	

^{*} Expressed as a percent of workers with three or more years of tenure on their current job.

Based on data from the Bureau of Labor Statistics.

Indicators of Recent Job Displacement. As noted above, the Displaced Worker Survey is conducted only once every two years, and the most recent published data are from the 1994 survey, which covers the 1991-93 period. Unfortunately, the official displacement data for the period after 1993 are not yet available.⁶ (The results of the 1996 Displaced Worker Survey, conducted in February, should be available later this summer.) Until the official displacement data are available, other measures can be used to get an indication of how the labor market has been changing since 1993.

One indicator comes from unemployment data on job losers. Figure 5 shows the job loss rate, defined as the ratio of recently unemployed job losers -- those who are unemployed due to job loss (as opposed to job leavers or labor market entrants), unemployed less than 5 weeks, and not on temporary layoff -- to total employment in the Current Population Survey. This job loss rate roughly approximates the net "flow" into unemployment due to job loss, since it considers only those who have lost their jobs recently. As shown in Figure 5, the job loss rate has continued to fall since 1992.



⁶ Based on previous experience, the displacement rate for 1993 is likely to be lower in the 1996 survey data than in the 1994 survey data.

* Official data on job displacement are not yet available beyond 1993. But based on unemployment data for job losers, the job loss rate has declined since then.

The Costs of Job Displacement. The Displaced Worker Survey provides information on the impact of job loss on workers. The results are sobering. According to analysis from the Bureau of Labor Statistics, roughly a quarter of those displaced during 1991 and 1992 had either stopped searching for work or had not yet found work by the time they were surveyed in February 1994. And while experiences varied widely, research conducted by Henry Farber of Princeton University suggests that the average real wage loss for workers displaced from a full-time job and re-employed into a full-time job was roughly 10 percent in the early 1980s as well as in the early 1990s. A study by Ann Huff Stevens of Rutgers University and the National Bureau of Economic Research also indicates that the wage loss due to displacement is persistent. Six or more years after displacement, a displaced worker's earnings remain roughly 10 percent below what they could have otherwise expected to earn.

In a market economy facing competitive pressures both nationally and internationally, it is inevitable that some job displacement will take place. Technology is constantly changing. New companies start up and some old ones contract or close down. Since change can be costly for workers, it is vital that policies are in place to help workers deal with that change. Portability of pensions and health benefits, effective re-employment services, adequate unemployment insurance, and education and training policies can all help reduce the adjustment costs between jobs. Moreover, it is important that displacement not take place needlessly. A stable macroeconomic environment with full employment will help minimize the need for layoffs and will maximize the chances for speedy reemployment of those who do lose their jobs.

* Job loss is costly. When faced with job loss, American workers must be equipped with the tools to find new jobs quickly.

CONCLUSION

The labor market is in the midst of a robust expansion in which 8.5 million jobs have been created since January 1993. Now that we have emerged from the last recession and are expanding in a steady, sustainable fashion, employment is growing most rapidly in those job categories offering the best-paid employment opportunities. Our analysis indicates that over two-thirds of recent employment growth has been in industry/occupation job categories with above-median wages; that the vast majority of new jobs being created are full-time; and that the proportion of workers holding multiple jobs has remained roughly constant since the late 1980s. But a dynamic labor market inevitably destroys some jobs while creating others, and the costs of job loss are both significant and persistent. In order to obtain the full benefits of a dynamic economy, we must reduce these adjustment costs.

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